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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,475	11/13/2001	Urban Johanson	MEWBURN	3312

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EXAMINER

BAUM, STUART F

ART UNIT PAPER NUMBER

1638

DATE MAILED: 05/14/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/890,475

Applicant(s)

JOHANSON ET AL.

Examiner

Stuart F. Baum

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-40 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.
2. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

3. Objection is made to the specification and claims for not incorporating SEQ ID NO's when referring to nucleic acid or amino acid sequences. 37 CFR 1.821(d) requires the use of the assigned sequence identifier (e.g. SEQ I.D. NO: #) in all instances where the description or claims of a patent application discuss sequences.
4. Group I, claim(s) 1-10, 18, 20-28, and 35-36, drawn to an isolated nucleic acid obtainable from the FRI locus of a plant, or a sequence obtainable from the FRI locus exhibiting the sequence of Figure 4, or variants of said sequence, a recombinant vector comprising an isolated nucleic acid obtainable from the FRI locus of a plant, a transformed host cell, a method for producing a transgenic plant, a transgenic plant, a method for influencing or affecting flowering time in a plant, or a method for delaying flowering.

Group II, claim(s) 12, drawn to a process for producing a nucleic acid.

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Group III, claim(s) 11, 13-15, and 17 drawn to an isolated nucleic acid for use as a probe or primer and a method for identifying or cloning a nucleic acid obtainable from the FRI locus of a plant comprising hybridization reactions.

Group IV, claim(s) 11, 13-14, and 16-17, drawn to an isolated nucleic acid for use as a probe or primer and a method for identifying or cloning a nucleic acid obtainable from the FRI locus of a plant comprising PCR reactions.

Group V, claim(s) 29-31, and 34, drawn to an isolated polypeptide.

Group VI, claim(s) 32, drawn to a method of making a polypeptide.

Group VII, claim(s) 33, drawn to an antibody.

Group VIII, claim(s) 35 and 37-38, drawn to a method for accelerating flowering time in a plant.

Group IX, claim(s) 19, 35 and 39, drawn to a method for influencing flowering time and modulating VRN2 or FLC expression comprising expressing a nucleic acid obtainable from the FRI locus of a plant and a second nucleic acid, and a vector used in the method.

Group X, claim(s) 40, drawn to a promoter sequence obtainable from the FRI locus of a plant.

5. Claims 11, 13-14 and 17 are generic to Groups III and IV and will be examined to the extent that they read on the elected invention.

6. Claim 35 is generic to claims I, VIII and IX and will be examined to the extent that it reads on the elected invention.

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7. If Applicant elects Groups I-IV, Applicant is also to elect one nucleic acid sequence selected from the group consisting of the nucleotide sequence of Fig. 4 and the nucleotide sequence of Fig. 5.

8. The claims are not linked by a single special technical feature because the invention of Group I does not constitute an advance over the prior art. Group I is taught by Simon et al (1996, Nature 284(6604):59-62) who teach a DNA sequence that when over-expressed in plants alters the flowering time of said transformed plant. Hence, there is no special technical feature that links the DNA and method of altering flowering time in a plant of Group I, to the process for producing a nucleic acid of Group II, to the probe and primer and method of isolating a nucleic acid of Groups III and IV, to the isolated protein of Group V, to the method of making a protein of Group VI, to the antibody of Group VII, to the method of accelerating flowering time in a plant of Group VIII, to the method of influencing flowering time and modulating VRN2 or FLC expression comprising transforming a plant with two nucleic acids of Group IX, or to the promoter sequence of Group X.

9. Furthermore, Applicant is reminded that nucleotide sequences either encoding different proteins or specifying specific expression patterns are structurally distinct chemical compounds and are unrelated to one another, as are different proteins structurally distinct chemical compounds and unrelated to one another. These sequences are thus deemed to normally constitute **independent and distinct** inventions. Absent evidence to the contrary, each such sequence is presumed to represent an independent and distinct invention. This requirement is not to be construed as a requirement for an election of species, since each nucleotide and amino acid sequence is not a member of a single genus of invention, but constitutes an independent and patentably distinct invention.

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10. Lastly, the sense method step of Group I is a distinct method from the antisense method of Group VIII in starting materials, method steps and end products.

11. Because these inventions are distinct for the reasons given above, and the literature and sequence searches required for each of the Groups are not required for another of the Groups, restriction for examination purposes as indicated is proper.

12. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

13. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stuart Baum whose telephone number is (703) 305-6997. The examiner can normally be reached on Monday-Friday 8:30AM – 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (703) 306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3014 or (703) 305-3014 for regular communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, who may be contacted at 308-0196.

Stuart F. Baum Ph.D.

May 6, 2003

DAVID T. FOX  
PRIMARY EXAMINER  
GROUP ~~180~~ 1638

A handwritten signature in cursive script, appearing to read "David T. Fox", written over the printed name and title.